

Permanent-Magnet Magnetizer Market Research: Global Status & Forecast by Geography, Type & Application (2017-2027)

<https://marketpublishers.com/r/P335EFE9704EN.html>

Date: August 2021

Pages: 50

Price: US\$ 2,280.00 (Single User License)

ID: P335EFE9704EN

Abstracts

According to 99Strategy, the Global Permanent-Magnet Magnetizer Market is estimated to reach xxx million USD in 2021 and projected to grow at the CAGR of xx% during the 2022-2027. The report analyses the global Permanent-Magnet Magnetizer market, the market size and growth, as well as the major market participants.

The analysis includes market size, upstream situation, market segmentation, market segmentation, price & cost and industry environment. In addition, the report outlines the factors driving industry growth and the description of market channels. The report begins from overview of industrial chain structure, and describes the upstream. Besides, the report analyses market size and forecast in different geographies, type and end-use segment, in addition, the report introduces market competition overview among the major companies and companies profiles, besides, market price and channel features are covered in the report.

Key Regions

Asia Pacific

North America

Europe

South America

Middle East & Africa

Key Companies

Brockhaus

CLA SA

Laboratorio Elettrofisico

Bussi Demagnetizing Systems

WALMAG MAGNETICS

Kanetec

Key Product Type

Alloy Permanent-Magnet Magnetizer

Ferrite Permanent-Magnet Magnetizer

Market by Application

Electronic

Industry

Household Appliances

Others

Main Aspects covered in the Report

Overview of the Permanent-Magnet Magnetizer market including production, consumption, status & forecast and market growth

2017-2021 historical data and 2022-2027 market forecast

Geographical analysis including major countries

Overview the product type market including development

Overview the end-user market including development

Contents

1 INDUSTRIAL CHAIN OVERVIEW

1.1 Permanent-Magnet Magnetizer Industry

1.1.1 Overview

Figure Permanent-Magnet Magnetizer Picture List

1.1.2 Characteristics of Permanent-Magnet Magnetizer

1.2 Upstream

1.2.1 Major Materials

1.2.2 Manufacturing Overview

1.3 Product List By Type

1.3.1 Alloy Permanent-Magnet Magnetizer

1.3.2 Ferrite Permanent-Magnet Magnetizer

1.4 End-Use List

1.4.1 Demand in Electronic

1.4.2 Demand in Industry

1.4.3 Demand in Household Appliances

1.4.4 Demand in Others

1.5 Global Market Overview

1.5.1 Global Market Size and Forecast, 2017-2027

Figure Global Market Size and Forecast with Growth Rate, 2017-2027

1.5.2 Global Market Size and Forecast by Geography with CAGR, 2017-2027

Table Global Market Size and Forecast by Geography with Growth Rate, 2017-2027

1.5.3 Global Market Size and Forecast by Product Type with CAGR, 2017-2027

Table Global Market Size and Forecast by Type with Growth Rate, 2017-2027

1.5.4 Global Market Size and Forecast by End-Use with CAGR, 2017-2027

Table Global Market Size and Forecast by End-Use with Growth Rate, 2017-2027

2 GLOBAL PRODUCTION & CONSUMPTION BY GEOGRAPHY

2.1 Global Production & Consumption

2.1.1 Global Production

Figure Global Production Volume Status and Growth Rate, 2017-2021, in Volume

Table Global Production Volume Status and Growth Rate by Geography, 2017-2021, in Volume

Figure Global Production Amount Status and Growth Rate, 2017-2021, in Million USD

Table Global Production Amount Status and Growth Rate by Geography, 2017-2021, in Million USD

2.1.2 Global Consumption

Figure Global Market Volume and Growth Rate, 2017-2021, in Volume

Table Global Market Volume and Growth Rate by Geography, 2017-2021, in Volume

Figure Global Market Amount and Growth Rate, 2017-2021, in Million USD

Table Global Market Amount and Growth Rate by Geography, 2017-2021, in Million USD

2.2 Geographic Production & Consumption

2.2.1 Production

2.2.1.1 Asia-Pacific

Figure Asia-Pacific Production Volume Status and Growth Rate, 2017-2021, in Volume

Table Asia-Pacific Production Volume Status and Growth Rate by Region, 2017-2021, in Volume

Figure Asia-Pacific Production Amount Status and Growth Rate, 2017-2021, in Million USD

Table Asia-Pacific Production Amount Status and Growth Rate by Region, 2017-2021, in Million USD

2.2.1.2 North America

Figure North America Production Volume Status and Growth Rate, 2017-2021, in Volume

Table North America Production Volume Status and Growth Rate by Region, 2017-2021, in Volume

Figure North America Production Amount Status and Growth Rate, 2017-2021, in Million USD

Table North America Production Amount Status and Growth Rate by Region, 2017-2021, in Million USD

2.2.1.3 South America

Figure South America Production Volume Status and Growth Rate, 2017-2021, in Volume

Table South America Production Volume Status and Growth Rate by Region, 2017-2021, in Volume

Figure South America Production Amount Status and Growth Rate, 2017-2021, in Million USD

Table South America Production Amount Status and Growth Rate by Region, 2017-2021, in Million USD

2.2.1.4 Europe

Figure Europe Production Volume Status and Growth Rate, 2017-2021, in Volume

Table Europe Production Volume Status and Growth Rate by Region, 2017-2021, in Volume

Figure Europe Production Amount Status and Growth Rate, 2017-2021, in Million USD

Table Europe Production Amount Status and Growth Rate by Region, 2017-2021, in Million USD

2.2.1.5 Middle East & Africa

Figure Middle East & Africa Production Volume Status and Growth Rate, 2017-2021, in Volume

Table Middle East & Africa Production Volume Status and Growth Rate by Region, 2017-2021, in Volume

Figure Middle East & Africa Production Amount Status and Growth Rate, 2017-2021, in Million USD

Table Middle East & Africa Production Amount Status and Growth Rate by Region, 2017-2021, in Million USD

2.2.2 Consumption

2.2.2.1 Asia-Pacific

Figure Asia-Pacific Market Volume and Growth Rate, 2017-2021, in Volume

Table Asia-Pacific Market Volume and Growth Rate by Region, 2017-2021, in Volume

Figure Asia-Pacific Market Amount and Growth Rate, 2017-2021, in Million USD

Table Asia-Pacific Market Amount and Growth Rate by Region, 2017-2021, in Million USD

2.2.2.2 North America

Figure North America Market Volume and Growth Rate, 2017-2021, in Volume

Table North America Market Volume and Growth Rate by Region, 2017-2021, in Volume

Figure North America Market Amount and Growth Rate, 2017-2021, in Million USD

Table North America Market Amount and Growth Rate by Region, 2017-2021, in Million USD

2.2.2.3 South America

Figure South America Market Volume and Growth Rate, 2017-2021, in Volume

Table South America Market Volume and Growth Rate by Region, 2017-2021, in Volume

Figure South America Market Amount and Growth Rate, 2017-2021, in Million USD

Table South America Market Amount and Growth Rate by Region, 2017-2021, in Million USD

2.2.2.4 Europe

Figure Europe Market Volume and Growth Rate, 2017-2021, in Volume

Table Europe Market Volume and Growth Rate by Region, 2017-2021, in Volume

Figure Europe Market Amount and Growth Rate, 2017-2021, in Million USD

Table Europe Market Amount and Growth Rate by Region, 2017-2021, in Million USD

2.2.2.5 Middle East & Africa

Figure Middle East & Africa Market Volume and Growth Rate, 2017-2021, in Volume

Table Middle East & Africa Market Volume and Growth Rate by Region, 2017-2021, in Volume

Figure Middle East & Africa Market Amount and Growth Rate, 2017-2021, in Million USD

Table Middle East & Africa Market Amount and Growth Rate by Region, 2017-2021, in Million USD

3 MAJOR MANUFACTURERS INTRODUCTION

3.1 Manufacturers Overview

Table Major Manufacturers Headquarters and Contact Information

Table Major Manufacturers Capacity List in 2021

3.2 Manufacturers List

3.2.1 Brockhaus Overview

Table Brockhaus Overview List

3.2.1.1 Product Specifications

3.2.1.2 Business Data (Production Volume (Volume), Production Amount (Million USD), Price, Cost, Margin)

Table Permanent-Magnet Magnetizer Business Operation of Brockhaus (Production Volume (Volume), Production Amount (Million USD), Price, Cost, Gross Margin)

3.2.1.3 Recent Developments

3.2.1.4 Future Strategic Planning

3.2.2 CLA SA Overview

Table CLA SA Overview List

3.2.2.1 Product Specifications

3.2.2.2 Business Data (Production Volume (Volume), Production Amount (Million USD), Price, Cost, Margin)

Table Permanent-Magnet Magnetizer Business Operation of CLA SA (Production Volume (Volume), Production Amount (Million USD), Price, Cost, Gross Margin)

3.2.2.3 Recent Developments

3.2.2.4 Future Strategic Planning

3.2.3 Laboratorio Elettrofisico Overview

Table Laboratorio Elettrofisico Overview List

3.2.3.1 Product Specifications

3.2.3.2 Business Data (Production Volume (Volume), Production Amount (Million USD), Price, Cost, Margin)

Table Permanent-Magnet Magnetizer Business Operation of Laboratorio Elettrofisico (Production Volume (Volume), Production Amount (Million USD), Price, Cost, Gross Margin)

3.2.3.3 Recent Developments

3.2.3.4 Future Strategic Planning

3.2.4 Bussi Demagnetizing Systems Overview

Table Bussi Demagnetizing Systems Overview List

3.2.4.1 Product Specifications

3.2.4.2 Business Data (Production Volume (Volume), Production Amount (Million USD), Price, Cost, Margin)

Table Permanent-Magnet Magnetizer Business Operation of Bussi Demagnetizing Systems (Production Volume (Volume), Production Amount (Million USD), Price, Cost, Gross Margin)

3.2.4.3 Recent Developments

3.2.4.4 Future Strategic Planning

3.2.5 WALMAG MAGNETICS Overview

Table WALMAG MAGNETICS Overview List

3.2.5.1 Product Specifications

3.2.5.2 Business Data (Production Volume (Volume), Production Amount (Million USD), Price, Cost, Margin)

Table Permanent-Magnet Magnetizer Business Operation of WALMAG MAGNETICS (Production Volume (Volume), Production Amount (Million USD), Price, Cost, Gross Margin)

3.2.5.3 Recent Developments

3.2.5.4 Future Strategic Planning

3.2.6 Kanetec Overview

Table Kanetec Overview List

3.2.6.1 Product Specifications

3.2.6.2 Business Data (Production Volume (Volume), Production Amount (Million USD), Price, Cost, Margin)

Table Permanent-Magnet Magnetizer Business Operation of Kanetec (Production Volume (Volume), Production Amount (Million USD), Price, Cost, Gross Margin)

3.2.6.3 Recent Developments

3.2.6.4 Future Strategic Planning

4 MARKET COMPETITION PATTERN

4.1 Market Size and Sketch

Figure Global Market Size and Growth Rate, 2017-2021, in Volume

Figure Global Market Size and Growth Rate, 2017-2021, in Million USD

Figure Global Competition Sketch Overview

4.2 Company Market Share

4.2.1 Global Production by Major Manufacturers

Table Global Production Volume List by Manufacturers, 2017-2021, in Volume

Table Global Production Volume Share List by Manufacturers, 2017-2021, in Volume

Figure Global Production Volume Share by Manufacturers in 2021, in Volume

Table Global Production Amount List by Manufacturers, 2017-2021, in Million USD

Table Global Production Amount Share List by Manufacturers, 2017-2021, in Million USD

Figure Global Production Amount Share by Manufacturers in 2021, in Million USD

4.2.2 Market Concentration Analysis

4.3 Market News and Trend

4.3.1 Merger & Acquisition

4.3.2 New Product Launch

5 PRODUCT TYPE SEGMENT

5.1 Global Overview by Product Type Segment

Table Global Market Status and Growth Rate by Product Type Segment, 2017-2021, in Million USD

Table Global Market Status and Growth Rate by Product Type Segment 2017-2021, in Volume

5.2 Segment Subdivision by Product Type

5.2.1 Market in Alloy Permanent-Magnet Magnetizer

5.2.1.1 Market Size

Figure Global Market Amount and Growth Rate in Alloy Permanent-Magnet Magnetizer , 2017-2021, in USD Million

Figure Global Market Amount and Growth Rate in Alloy Permanent-Magnet Magnetizer , 2017-2021, in Volume

5.2.1.2 Situation & Development

5.2.2 Market in Ferrite Permanent-Magnet Magnetizer

5.2.2.1 Market Size

Figure Global Market Amount and Growth Rate in Ferrite Permanent-Magnet Magnetizer , 2017-2021, in USD Million

Figure Global Market Amount and Growth Rate in Ferrite Permanent-Magnet Magnetizer , 2017-2021, in Volume

5.2.2.2 Situation & Development

6 END-USE SEGMENT

6.1 Global Overview by End-Use Segment

Table Global Market Status and Growth Rate by End-Use Segment, 2017-2021, in Million USD

Table Global Market Status and Growth Rate by End-Use Segment 2017-2021, in Volume

6.2 Segment Subdivision

6.2.1 Market in Electronic

6.2.1.1 Market Size

Figure Global Market Amount and Growth Rate in Electronic , 2017-2021, in USD Million

Figure Global Market Amount and Growth Rate in Electronic , 2017-2021, in Volume

6.2.1.2 Situation & Development

6.2.2 Market in Industry

6.2.2.1 Market Size

Figure Global Market Amount and Growth Rate in Industry , 2017-2021, in USD Million

Figure Global Market Amount and Growth Rate in Industry , 2017-2021, in Volume

6.2.2.2 Situation & Development

6.2.3 Market in Household Appliances

6.2.3.1 Market Size

Figure Global Market Amount and Growth Rate in Household Appliances , 2017-2021, in USD Million

Figure Global Market Amount and Growth Rate in Household Appliances , 2017-2021, in Volume

6.2.3.2 Situation & Development

6.2.4 Market in Others

6.2.4.1 Market Size

Figure Global Market Amount and Growth Rate in Others, 2017-2021, in USD Million

Figure Global Market Amount and Growth Rate in Others, 2017-2021, in Volume

6.2.4.2 Situation & Development

7 MARKET FORECAST & TREND

7.1 Regional Forecast

Table Global Market Forecast by Region Segment 2022-2027, in Million USD

Table Global Market Forecast by Region Segment 2022-2027, in Volume

7.2 Consumption Forecast

7.2.1 Product Type Forecast

Table Global Market Amount by Product Type Segment 2022-2027, in Million USD

Table Global Market Volume by Product Type Segment 2022-2027, in Volume

7.2.2 End-Use Forecast

Table Global Market Amount by End-Use Segment 2022-2027, in Million USD

Table Global Market Volume by End-Use Segment 2022-2027, in Volume

7.3 Investment Trend

7.4 Consumption Trend

8 PRICE & CHANNEL

8.1 Price and Cost

8.1.1 Price

8.1.2 Cost

Figure Cost Component Ratio

8.2 Channel Segment

9 MARKET DRIVERS & INVESTMENT ENVIRONMENT

9.1 Market Drivers

9.2 Investment Environment

9.3 Impact of Coronavirus on the Permanent-Magnet Magnetizer Industry

9.3.1 Impact on Industry Upstream

9.3.2 Impact on Industry Downstream

9.3.3 Impact on Industry Channels

9.3.4 Impact on Industry Competition

9.3.5 Impact on Industry Employment

10 RESEARCH CONCLUSION

List Of Tables

LIST OF TABLES

Table Global Market Size and Forecast by Geography with Growth Rate, 2017-2027

Table Global Market Size and Forecast by Type with Growth Rate, 2017-2027

Table Global Market Size and Forecast by End-Use with Growth Rate, 2017-2027

Table Global Production Volume Status and Growth Rate by Geography, 2017-2021, in Volume

Table Global Production Amount Status and Growth Rate by Geography, 2017-2021, in Million USD

Table Global Market Volume and Growth Rate by Geography, 2017-2021, in Volume

Table Global Market Amount and Growth Rate by Geography, 2017-2021, in Million USD

Table Asia-Pacific Production Volume Status and Growth Rate by Region, 2017-2021, in Volume

Table Asia-Pacific Production Amount Status and Growth Rate by Region, 2017-2021, in Million USD

Table North America Production Volume Status and Growth Rate by Region, 2017-2021, in Volume

Table North America Production Amount Status and Growth Rate by Region, 2017-2021, in Million USD

Table South America Production Volume Status and Growth Rate by Region, 2017-2021, in Volume

Table South America Production Amount Status and Growth Rate by Region, 2017-2021, in Million USD

Table Europe Production Volume Status and Growth Rate by Region, 2017-2021, in Volume

Table Europe Production Amount Status and Growth Rate by Region, 2017-2021, in Million USD

Table Middle East & Africa Production Volume Status and Growth Rate by Region, 2017-2021, in Volume

Table Middle East & Africa Production Amount Status and Growth Rate by Region, 2017-2021, in Million USD

Table Asia-Pacific Market Volume and Growth Rate by Region, 2017-2021, in Volume

Table Asia-Pacific Market Amount and Growth Rate by Region, 2017-2021, in Million USD

Table North America Market Volume and Growth Rate by Region, 2017-2021, in Volume

Table North America Market Amount and Growth Rate by Region, 2017-2021, in Million USD

USD

Table South America Market Volume and Growth Rate by Region, 2017-2021, in Volume

Table South America Market Amount and Growth Rate by Region, 2017-2021, in Million USD

Table Europe Market Volume and Growth Rate by Region, 2017-2021, in Volume

Table Europe Market Amount and Growth Rate by Region, 2017-2021, in Million USD

Table Middle East & Africa Market Volume and Growth Rate by Region, 2017-2021, in Volume

Table Middle East & Africa Market Amount and Growth Rate by Region, 2017-2021, in Million USD

Table Major Manufacturers Headquarters and Contact Information

Table Major Manufacturers Capacity List in 2021

Table Brockhaus Overview List

Table Permanent-Magnet Magnetizer Business Operation of Brockhaus (Production Volume (Volume), Production Amount (Million USD), Price, Cost, Gross Margin)

Table CLA SA Overview List

Table Permanent-Magnet Magnetizer Business Operation of CLA SA (Production Volume (Volume), Production Amount (Million USD), Price, Cost, Gross Margin)

Table Laboratorio Elettrofisico Overview List

Table Permanent-Magnet Magnetizer Business Operation of Laboratorio Elettrofisico (Production Volume (Volume), Production Amount (Million USD), Price, Cost, Gross Margin)

Table Bussi Demagnetizing Systems Overview List

Table Permanent-Magnet Magnetizer Business Operation of Bussi Demagnetizing Systems (Production Volume (Volume), Production Amount (Million USD), Price, Cost, Gross Margin)

Table WALMAG MAGNETICS Overview List

Table Permanent-Magnet Magnetizer Business Operation of WALMAG MAGNETICS (Production Volume (Volume), Production Amount (Million USD), Price, Cost, Gross Margin)

Table Kanetec Overview List

Table Permanent-Magnet Magnetizer Business Operation of Kanetec (Production Volume (Volume), Production Amount (Million USD), Price, Cost, Gross Margin)

Table Global Production Volume List by Manufacturers, 2017-2021, in Volume

Table Global Production Volume Share List by Manufacturers, 2017-2021, in Volume

Table Global Production Amount List by Manufacturers, 2017-2021, in Million USD

Table Global Production Amount Share List by Manufacturers, 2017-2021, in Million USD

Table Global Market Status and Growth Rate by Product Type Segment, 2017-2021, in Million USD

Table Global Market Status and Growth Rate by Product Type Segment 2017-2021, in Volume

Table Global Market Status and Growth Rate by End-Use Segment, 2017-2021, in Million USD

Table Global Market Status and Growth Rate by End-Use Segment 2017-2021, in Volume

Table Global Market Forecast by Region Segment 2022-2027, in Million USD

Table Global Market Forecast by Region Segment 2022-2027, in Volume

Table Global Market Amount by Product Type Segment 2022-2027, in Million USD

Table Global Market Volume by Product Type Segment 2022-2027, in Volume

Table Global Market Amount by End-Use Segment 2022-2027, in Million USD

Table Global Market Volume by End-Use Segment 2022-2027, in Volume

List Of Figures

LIST OF FIGURES

Figure Permanent-Magnet Magnetizer Picture List

Figure Global Market Size and Forecast with Growth Rate, 2017-2027

Figure Global Production Volume Status and Growth Rate, 2017-2021, in Volume

Figure Global Production Amount Status and Growth Rate, 2017-2021, in Million USD

Figure Global Market Volume and Growth Rate, 2017-2021, in Volume

Figure Global Market Amount and Growth Rate, 2017-2021, in Million USD

Figure Asia-Pacific Production Volume Status and Growth Rate, 2017-2021, in Volume

Figure Asia-Pacific Production Amount Status and Growth Rate, 2017-2021, in Million USD

Figure North America Production Volume Status and Growth Rate, 2017-2021, in Volume

Figure North America Production Amount Status and Growth Rate, 2017-2021, in Million USD

Figure South America Production Volume Status and Growth Rate, 2017-2021, in Volume

Figure South America Production Amount Status and Growth Rate, 2017-2021, in Million USD

Figure Europe Production Volume Status and Growth Rate, 2017-2021, in Volume

Figure Europe Production Amount Status and Growth Rate, 2017-2021, in Million USD

Figure Middle East & Africa Production Volume Status and Growth Rate, 2017-2021, in Volume

Figure Middle East & Africa Production Amount Status and Growth Rate, 2017-2021, in Million USD

Figure Asia-Pacific Market Volume and Growth Rate, 2017-2021, in Volume

Figure Asia-Pacific Market Amount and Growth Rate, 2017-2021, in Million USD

Figure North America Market Volume and Growth Rate, 2017-2021, in Volume

Figure North America Market Amount and Growth Rate, 2017-2021, in Million USD

Figure South America Market Volume and Growth Rate, 2017-2021, in Volume

Figure South America Market Amount and Growth Rate, 2017-2021, in Million USD

Figure Europe Market Volume and Growth Rate, 2017-2021, in Volume

Figure Europe Market Amount and Growth Rate, 2017-2021, in Million USD

Figure Middle East & Africa Market Volume and Growth Rate, 2017-2021, in Volume

Figure Middle East & Africa Market Amount and Growth Rate, 2017-2021, in Million USD

Figure Global Market Size and Growth Rate, 2017-2021, in Volume

Figure Global Market Size and Growth Rate, 2017-2021, in Million USD

Figure Global Competition Sketch Overview

Figure Global Production Volume Share by Manufacturers in 2021, in Volume

Figure Global Production Amount Share by Manufacturers in 2021, in Million USD

Figure Global Market Amount and Growth Rate in Alloy Permanent-Magnet Magnetizer , 2017-2021, in USD Million

Figure Global Market Amount and Growth Rate in Alloy Permanent-Magnet Magnetizer , 2017-2021, in Volume

Figure Global Market Amount and Growth Rate in Ferrite Permanent-Magnet Magnetizer , 2017-2021, in USD Million

Figure Global Market Amount and Growth Rate in Ferrite Permanent-Magnet Magnetizer , 2017-2021, in Volume

Figure Global Market Amount and Growth Rate in Electronic , 2017-2021, in USD Million

Figure Global Market Amount and Growth Rate in Electronic , 2017-2021, in Volume

Figure Global Market Amount and Growth Rate in Industry , 2017-2021, in USD Million

Figure Global Market Amount and Growth Rate in Industry , 2017-2021, in Volume

Figure Global Market Amount and Growth Rate in Household Appliances , 2017-2021, in USD Million

Figure Global Market Amount and Growth Rate in Household Appliances , 2017-2021, in Volume

Figure Global Market Amount and Growth Rate in Others, 2017-2021, in USD Million

Figure Global Market Amount and Growth Rate in Others, 2017-2021, in Volume

Figure Cost Component Ratio

I would like to order

Product name: Permanent-Magnet Magnetizer Market Research: Global Status & Forecast by Geography, Type & Application (2017-2027)

Product link: <https://marketpublishers.com/r/P335EFE9704EN.html>

Price: US\$ 2,280.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/P335EFE9704EN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970

